

May 18, 2012

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: *Ex Parte* Presentation, ET Docket No. 08-59
Amendment of the Commission's Rules to Provide Spectrum for the
Operation of Medical Body Area Networks

Dear Ms. Dortch,

On May 18, 2012, the following representatives met with Paul Murray, interim Legal Advisor to Commissioner Rosenworcel, to discuss issues related to the above-referenced proceeding. Philips Healthcare: Delroy Smith, Principal Scientist; Paul Coss, Director Marketing, Emergency Care; & David Siddall, counsel; GE Healthcare: Ari Fitzgerald, counsel; Aerospace and Flight Test Radio Coordinating Council (AFTRCC): by phone: Joe Cramer, Boeing; Tom Fagan, Raytheon; and Chip Yorkgitis, counsel to Raytheon; present: Ken Keane, counsel to AFTRCC; American Society for Healthcare Engineering of the American Hospital Association (ASHE): Tim Cooney, counsel.

The parties discussed the negotiated spectrum sharing arrangement in general terms, noting our understanding that the joint proposal negotiated by the parties and submitted to the Commission has been revised in a number of respects, but that the revisions were undertaken with an eye toward preserving the parties' intent as reflected in the joint proposal. The text of the rules proposed by the staff will not be available until adoption and release, so while the nature of the changes described to us indicates that the proposed rules appear to allow for an effective technologically-based sharing arrangement between primary aeronautical telemetry and secondary Medical Body Area Networks, the parties are not in a position to offer any definitive views until reviewing the text when released. A summary of major points in the proceeding based upon the joint proposal was left with Mr. Murray, and a copy is attached.

Philips expressed concern that the uncertainty introduced by the spectrum coordinator appointment process will delay introduction in hospitals of complete wireless MBAN systems, and requested that the Commission articulate in the Report and Order and Further Notice a clear self-imposed deadline for appointment(s) of no later than May 1 (or June 1) 2013, which is adequate to complete the process. Doing so would provide everyone involved specific expectations and facilitate funding of the activities necessary before these new systems can be introduced.

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AFTRCC called attention to the support and approval of the Department of Defense to allow spectrum sharing in what has long been a Restricted band extensively used by industry and Government for flight test telemetry operations.

A view also was expressed by certain of the participants that the technological means of enforcing secondary status developed by the parties to this proceeding might prove useful in other spectrum proceedings where the prevention of interference from a prospective secondary user is at issue.

Respectfully Submitted,

/s/

David R. Siddall, Esq.
Counsel to Philips Healthcare
DS Law, PLLC
1717 Pennsylvania Ave. NW, Ste. 1025
Washington, DC 20006
(202) 559-4690

/s/

Ari Q. Fitzgerald, Esq.
Counsel to GE Healthcare
Hogan Lovells US LLP
555 Thirteenth St. NW
Washington, DC 20004
(202) 637-5600

/s/

William K. Keane, Esq.
Counsel to AFTRCC
Duane Morris LLP
505 Ninth St. NW, 9th Flr
Washington, DC 20004
(202) 776-7800

/s/

Timothy J. Cooney, Esq.
Counsel to ASHE
Wilkinson Barker Knauer, LLP
2300 N St. NW, Ste. 700
Washington, DC 20037
(202) 783-4141

Attachment
cc: Paul Murray

Medical Body Area Networks (“MBANs”), Docket 08-59

Summary presented jointly by Philips Healthcare, GE Healthcare, the Aerospace Flight Test Coordinating Council (AFTRCC), and the American Society of Healthcare Engineering, American Hospital Association (ASHE)

MBANS

Expansion of monitoring capabilities will improve the delivery of patient care and reduce health care costs by extending monitoring to all patients, speeding diagnosis, allowing earlier intervention, and soliciting faster clinician response. Today, monitoring in hospitals is costly and requires multiple wired connections that limit patient mobility. Currently only about 50 % of hospital patients -- primarily those under acute and critical care -- are constantly monitored. Studies show that monitoring non-critical patients allows detecting events earlier and lessens their consequence before the patient becomes critical.

- MBANs are wireless monitors that solve a problem not addressed by current wireless monitors – a “last meter” wireless link to eliminate the wires and cables that currently tether a patient to the monitor. Untethering patients will allow them freedom of movement to walk and exercise, resulting in more rapid recovery and discharge.
- MBANs promise is to reduce overall healthcare costs by streamlining clinical workflow by, for example, eliminating unintentional unplugging of leads and the requirement to sterilize re-usable cables. Patient outcomes will be improved by post-operative patient mobility, reduced infection rates, and earlier diagnosis and intervention due to earlier detection of impending events.
- MBAN monitors will extend care beyond traditional settings to patients wherever they are, from the hospital to emergency vehicles to the home.
- Predictive software built into the network, based upon pattern recognition, will alert practitioners to possible abnormalities even before vital signs may be indicative.
- The body is an integrated system and medicine is moving into a world of looking at patient parameters as an integrated whole. MBANS will further this integrated approach with more measurements of higher accuracy in diagnostics, resulting in improved treatment.
- Automatic preservation of patient data in their electronic health records will be facilitated.

SPECTRUM

The 2.36-2.4 GHz spectrum allows MBANS to benefit from the multiple technologies and devices already mass produced for the 2.4 GHz license-exempt band. This particular spectrum will significantly lower device cost, which in turn will foster increased penetration of MBANS and the spread of its benefits. Lower costs and better patient outcomes will benefit the entire healthcare system.

The 2.3 GHz spectrum at issue primarily is being used for testing aircraft and missiles by aerospace manufacturers and the U.S. Government. Frequency coordination is performed by AFTRCC in concert with the Government agencies. In a months-long process Philips, GE and AFTRCC collaborated to produce a joint proposal to the FCC for sharing this spectrum. ASHE, the coordinator for Wireless Medical Telemetry Service (“WMTS”) spectrum used at hospitals, joined to provide their expertise in the location of hospitals and spectrum management needs unique in the medical environment.

- The joint proposal employs a combination of proven propagation prediction techniques, traditional co-ordination registration, and MBANS automated device features that together enable reliable sharing of 2360-2390 MHz without interference between primary aeronautical mobile telemetry (“AMT”) operations and the new secondary MBANS in healthcare facilities.
- The MBAN rules proposed by Philips, GE, and AFTRCC incorporate a technological means of enforcing secondary status for MBANS that will protect safety-related flight test communications.
- Implementation of a time-limited electronic key in MBANs devices – an electronic authorization – prevents MBANs equipment from operating except when authorized. In addition to this “turn-on” feature, continued operation of each patient device in the protected 2360-2390 MHz spectrum is possible only while the device receives a signal from fixed devices within the hospitals (similar to WiFi Access Points).
- A small number of locations having line-of-sight to AMT receive sites, estimated at fewer than 2 percent of all hospitals, may be able to use portions of 2360-2390 MHz only when not utilized by AMT services.
- MBANs devices will be permitted to use 2390-2400 MHz on a secondary basis at slightly higher power without geographic restriction. This will allow use of MBANS in homes, ambulances, and wherever else desired.
- An MBANS spectrum coordinator will be appointed by the FCC to coordinate hospital use of the spectrum, subject to an agreement and joint approval from AFTRCC (the current coordinator).
- A transition plan will be required for each coordinated MBANS installation to ensure that changes in AMT use can be accommodated.

The joint proposal achieves a creative solution to spectrum sharing by building upon technology and a robust coordination regime. Philips, GE and AFTRCC urge Commission approval of their proposal.